

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed November 29, 2005 ("Office Action"). At the time of the Office Action, Claims 1-20 were pending in the application. In the Office Action, the Examiner rejects Claims 1-20. Applicants herein amend Claims 1 and 3 to correct minor typographical errors. Applicants do not admit that any amendments are necessary due to any prior art or any of the Examiner's rejections. Applicants respectfully request reconsideration and allowance of all pending claims.

Claim Rejections - 35 U.S.C. § 103

Claims 1-3

The Examiner rejects Claims 1-3 under U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,430,593 B1 issued to Lindsley (hereafter "*Lindsley*") in view of Pai, et al., "Flash: An Efficient and Portable Web Server" (hereafter "*Pai*"). Applicants respectfully request reconsideration and allowance of Claims 1-3.

The cited references fail to support the rejection for several reasons. First, the *Lindsley-Pai* combination is improper because *Pai* teaches away from "a plurality of threads operable to cooperatively complete a task" as recited, in part, in amended Claim 1. Second, the cited references fail to teach, suggest, or disclose that "a plurality of threads send PTE messages to each other while cooperatively completing a task" as recited, in part, in amended Claim 1. Third, the proposed combination fails to teach, suggest, or disclose a plurality of threads "configured to send event information associated with the task in PTE messages to the finite state machine" as recited, in part, in amended Claim 1.

At the outset, Applicants respectfully request that the Examiner withdraw the *Lindsley-Pai* combination as improper. *Pai* specifically teaches away from amended Claim 1. A reference must be considered in its entirety, including portions that would lead away from the claimed invention. MPEP § 2141.02. Amended Claim 1 recites, in part, "the plurality of threads operable to *cooperatively* complete a task." (Emphasis added). The proposed combination fails to teach, suggest, or disclose this aspect of amended Claim 1. Notably, *Pai* specifically teaches away from this aspect of amended Claim 1. *Pai* discloses a multi-threaded architecture and a multi-process architecture. In the multi-threaded

architecture, “[*e*]ach thread performs all the steps associated with one HTTP request before accepting a new request, similar to the MP model’s use of a process.” (*Pai*; § 3.2, ¶ 1). Thus, according to *Pai*, a particular thread performs “all the steps” of a particular task. As a result, the threads in *Pai* complete tasks *individually* rather than “*cooperatively*” as recited, in part, in amended Claim 1. (Emphasis added). In describing the multi-process architecture, *Pai* teaches that the system is designed “to *minimize* interprocess communication” among processes. (*Pai*; § 5.1, ¶ 3). Thus, rather than communicate and cooperate to complete a task, the threads in the multi-process architecture act independently. As a result, for both architectures disclosed in *Pai*, the threads act *individually* rather than “*cooperatively*” as recited, in part, in amended Claim 1. Even if *Pai* can be read as threads communicating with each other via shared global variables (which Applicants traverse), *Pai* specifically teaches away from threads “operable to cooperatively complete a task” as recited, in part, in amended Claim 1. Furthermore, none of the cited references teach, suggest, or disclose this aspect of amended Claim 1. Accordingly, Applicants respectfully request that the Examiner withdraw the proposed combination as improper.

Second, the cited references fail to teach, suggest, or disclose that “a plurality of threads send PTE messages to each other” as recited, in part, in amended Claim 1. The Examiner relies on *Pai* for this aspect of amended Claim 1. *Pai* discloses a Web server that uses independent threads. (*Pai*; § 3.2, ¶¶ 1-2). In *Pai*, however, the independent threads do not send messages, but rather “share global variables.” (*Pai*; § 3.2, ¶ 2). A global variable in *Pai* is a “single shared address space,” and to access the address space, the threads must use “synchronization to control access to the shared data.” (*Pai*; § 3.2, ¶ 2). Thus, *Pai* teaches threads using a shared address space. In contrast, amended Claim 1 recites that “a plurality of threads send PTE messages to each other.” Accessing an address space, as disclosed in *Pai*, does not equate to sending “PTE messages” as recited, in part, in amended Claim 1. In *Pai*, a thread must affirmatively access the shared space and seek out the data stored in the shared space. In contrast, amended Claim 1 recites that the “threads *send* PTE messages to each other.” (Emphasis added).

In the Office Action, the Examiner addresses the foregoing point by merely stating: “*Pai* clearly teaches the Flash Web server implements the AMPED architecture described in section 3, in that architecture, a server process assisted by helper processes, and inter-process communication is [sic] occur between the server process and helper processes.” The

Examiner does not provide any citation for this conclusory statement. Furthermore, this conclusory statement does not rebut the fact that, in *Pai*, the threads share a common address space rather than sending “PTE messages” as recited, in part, in amended Claim 1. Thus, there is nothing in the cited references that teaches, suggests, or discloses that “a plurality of threads send PTE messages to each other” as recited, in part, in amended Claim 1. Accordingly, the references fail to support the rejection.

Third, the cited references do not teach, suggest, or disclose a plurality of threads “configured to send event information associated with the task in PTE messages to the finite state machine” as recited, in part, in amended Claim 1. The Examiner relies on *Lindsley* for a finite state machine and on *Pai* for the use of independent threads. As explained above, the threads in *Pai* are configured to access a shared address space. (*Pai*; § 3.2, ¶ 2). There is nothing in *Pai* that teaches, suggests, or discloses that the threads are “configured to send event information associated with the task in PTE messages” as recited, in part, in amended Claim 1. Significantly, the threads in *Pai* are not “configured to send event information” at all. Because the references fail to teach, suggest, or disclose this aspect of amended Claim 1, the references do not support the rejection. For at least these reasons, Applicants respectfully request reconsideration and allowance of amended Claim 1.

Claims 2-3 depend from amended Claim 1, shown above to be allowable. In addition, these Claims recite further elements not taught, suggested, or disclosed by the cited references. For example, the cited references fail to teach, suggest, or disclose that “the interpreter maps the messages to actions using a look-up table” as recited, in part, in amended Claim 3. The Examiner relies on *Lindsley* for this aspect of amended Claim 3. The cited portion of *Lindsley* discloses the use of semaphores to determine whether to block a task. (*Lindsley*; col. 18, ll. 29-40). Thus, the system in *Lindsley* uses semaphores rather than “a look-up table” as recited, in part, in amended Claim 3. Furthermore, there is nothing in *Lindsley* that teaches, suggests, or discloses an “interpreter” or the mapping of “messages to actions using a look-up table” as recited, in part, in amended Claim 3. Because the cited references fail to teach, suggest, or disclose these aspects of amended Claim 3, the cited references fail to support the rejection. For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 2-3.

Claims 4-20

The Examiner rejects Claims 4-20 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,430,593 B1 issued to Lindsley (hereafter "*Lindsley*") in view of Pai et al., "Flash: An Efficient and Portable Web Server" (hereafter "*Pai*") and further in view of U.S. Patent No. 5,727,214 issued to Allen (hereafter "*Allen*"). Applicants respectfully request reconsideration and allowance of Claims 4-20.

The proposed combination fails to teach, suggest, or disclose each element of Claim 6. In particular, the cited references fail to teach, suggest, or disclose "mapping the event information and the present state to one or more actions stored in a storage device" as recited, in part, in Claim 6. *Lindsley* discloses a task scheduling accelerator that comprises a state machine. (*Lindsley*; col. 9, ll. 21-23). The Office Action combines this reference with *Allen*, which discloses a cursor state machine and a disposition matrix. (*Allen*; col. 9, ll. 30-33; col. 12, ll. 7-11). There is nothing in the cited references, however, that teaches, suggests, or discloses "mapping the event information and the present state to one or more actions" as recited, in part, in Claim 6. Furthermore, the cited references fail to teach, suggest, or disclose "one or more actions stored in a storage device" as recited, in part, in Claim 6. Accordingly, the cited references fail to support the rejection. For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 6.

Claims 4-5 and 7-20 depend from independent claims shown above to be allowable. In addition, these claims recite further elements not taught, suggested, or disclosed by the cited references. For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 4-5 and 7-20.

CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Samir A. Bhavsar, Attorney for Applicants, at the Examiner's convenience at (214) 953-6581.

Although no fees are believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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